WO 2005/022919 PCT/US2004/027397

20

CLAIMS

- 1. A method for decoding a hybrid intra-inter encoded block comprising: combining a first prediction of a current block with a second prediction of a current block; wherein the first prediction of the current block is intra prediction and the second prediction of the current block is inter prediction.
- 2. The method of claim 1, wherein decoding the block includes combining the first prediction and the second prediction and a third prediction of the current block.
- 3. The method of claim 1, further comprising reducing the filter strength of a deblocking filter adapted to increase the correlation between pixels adjacent to the current block.

4. The method of claim 1, wherein the first prediction and the second prediction are combined by averaging the first prediction and the second prediction.

- 5. The method of claim 1, wherein the first prediction and the second prediction are combined by weighting each of the first prediction and the second prediction.
- 6. The method of claim 1, wherein the current block is a 16 \times 16 macroblock.
 - 7. The method of claim 1, wherein the current block is a sub-macroblock.
- 8. The method of claim 1, wherein the current block is a 4×4 submacroblock partition.

25

5

10

15

20

WO 2005/022919 PCT/US2004/027397

9. A video decoder adapted to decode a hybrid intra-inter coded block and to provide reconstructed pixel data; the decoder comprising: an intra-frame prediction block being operatively connected to a combining unit and for outputting a first intra prediction of the block; and an inter-frame prediction block being operatively connected to the combining unit and for outputting a first inter prediction of the block.

5

10

15

20

25

30

- 10. The video decoder of claim 9, wherein the combining unit is adapted to combine the first intra prediction and the first inter prediction.
- 11. The video decoder of claim 9, wherein the hybrid intra-inter coded block is the average of the first intra prediction and the first inter prediction.
 - 12. A television comprising a video decoder as claimed in claim 9.
- 13. A video decoder adapted to decode a bitstream including bi-predictive intra-inter encoded blocks.
- 14. A method for video decoding a block comprising: combining a first prediction of a current block with a second prediction of a current block; wherein the first prediction of the current block is intra prediction and the second prediction of the current block is inter prediction.
 - 15. A video decoder for decoding blocks within frames of a sequence of two dimensional images, the decoder comprising: an intra-frame prediction block being operatively connected to a combining unit and for outputting a first intra prediction of a block; and an inter-frame prediction block being operatively connected to the combining unit and for outputting a first inter prediction of the block; wherein the combining unit is adapted to combine the first intra prediction and the first inter prediction and to output a hybrid intra-inter coded block.
 - 16. The video decoder of claim 15 wherein the combining unit is a summing block.

WO 2005/022919 PCT/US2004/027397

22

- 17. The video decoder of claim 15 wherein the combining unit combines the first intra prediction and the first inter prediction by average the two predictions.
- 18. The video decoder of claim 15 wherein the combining unit combines the first intra prediction and the first inter prediction by using a weighted combination of the two predictions.

5

- 19. A method for video decoding a block comprising: combining a first prediction type for a current block with a second prediction type for a current block; wherein the combination of the first prediction type and the second prediction type forms a hybrid prediction type.
- 20. The method of claim 19 wherein the step of combining is accomplished using a summing block.
 - 21. The method of claim 19 wherein the step of combining the two prediction types is accomplished by averaging the two prediction types.
- 22. The method of claim 19 wherein the step of combining the two prediction types is accomplished by applying a weighted combination of the two prediction types.